

# WEIPENG HE

Seattle, WA 98109 • [heweipeng@gmail.com](mailto:heweipeng@gmail.com) • (206) 209-7280 • [www.linkedin.com/in/hwp0](http://www.linkedin.com/in/hwp0)

## Publications

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- [1] Egocentric Audio-Visual Noise Suppression.  
Roshan Sharma, Weipeng He, Ju Lin, Egor Lakomkin, Yang Liu, Kaustubh Kalgaonkar,  
in *2023 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)* [doi]
- [2] Multi-task Neural Network for Robust Multiple Speaker Embedding Extraction.  
Weipeng He, Petr Motlicek, and Jean-Marc Odobez,  
in *Proc. Interspeech 2021* [doi]
- [3] Neural Network Adaptation and Data Augmentation for Multi-Speaker Direction-of-Arrival Estimation.  
Weipeng He, Petr Motlicek, and Jean-Marc Odobez,  
*IEEE/ACM Transactions on Audio, Speech, and Language Processing*, vol. 29, pp. 1303–1317, 2021 [doi]
- [4] IEEE SLT 2021 Alpha-mini Speech Challenge: Open Datasets, Tracks, Rules and Baselines.  
Yihui Fu, Weipeng He, et al.  
in *2021 IEEE Spoken Language Technology Workshop (SLT)* [doi]
- [5] Spatial attention for far-field speech recognition with deep beamforming neural networks.  
Weipeng He, Lu Lu, Biqiao Zhang, Jay Mahadeokar, Kaustubh Kalgaonkar, and Christian Fuegen,  
in *2020 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)* [doi]
- [6] The MuMMER Data Set for Robot Perception in Multi-Party HRI Scenarios.  
Olivier Canevet, Weipeng He, Petr Motlicek, and Jean-Marc Odobez,  
in *2020 29th IEEE International Conference on Robot and Human Interactive Communication (RO-MAN)*
- [7] Adaptation of multiple sound source localization neural networks with weak supervision and domain-adversarial training.  
Weipeng He, Petr Motlicek, and Jean-Marc Odobez,  
in *2019 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP)* [doi]
- [8] MuMMER: Socially intelligent human-robot interaction in public spaces.  
Mary Ellen Foster, Weipeng He, et al.  
in *Proc. AI-HRI 2019* [preprint]
- [9] Joint localization and classification of multiple sound sources using a multi-task neural network.  
Weipeng He, Petr Motlicek, and Jean-Marc Odobez,  
in *Proc. Interspeech 2018* [doi, video]
- [10] Deep neural networks for multiple speaker detection and localization.  
Weipeng He, Petr Motlicek, and Jean-Marc Odobez,  
in *2018 IEEE International Conference on Robotics and Automation (ICRA)* [doi, video]
- [11] Multimodal object recognition from visual and audio sequences.  
Weipeng He, Haojun Guan, and Jianwei Zhang,  
in *2015 IEEE Int. Conf. on Multisensor Fusion and Information Integration for Intelligent Systems (MFI)*
- [12] What to do first: the initial behavior in a multi-sensory household object recognition and categorization system.  
Haojun Guan, Weipeng He, and Jianwei Zhang,

in 2014 *IEEE Int. Conf. on Multisensor Fusion and Information Integration for Intelligent Systems (MFI)*

- [13] THUNLP at TAC KBP 2011 in entity linking.  
Yu Zhao, Weipeng He, Zhiyuan Liu, and Maosong Sun,  
in *Proceedings of TAC, 2011*